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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,459	01/12/2006	Anne Lise Girboux	09639/100M018-US1	6324
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DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER GRESO, AARON J	
			ART UNIT 4131	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,459	<b>Applicant(s)</b> GIRBOUX ET AL.	
	<b>Examiner</b> AARON GRESO	<b>Art Unit</b> 4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/20/2005; 2/10/2005</u> .                                   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Beck et al.* (US 5939478) in view of *Boden* (US 4331571).

The reference by *Beck et al.* indicates the value of silicone emulsion composition types that can be especially useful as a perfume carrier and for hair conditioning (*Col 10 Lines 24-30 and Claim 10*).

*Beck et al. et al.* (*Abstract and Col 2, Lines 29-46*) teaches that a silicone and water emulsion compositions are prepared to make viscous liquids, gels and pastes. Such silicone emulsions start off containing silicone polymers or pre-polymers according to the general formula  $-(\text{SiR}^1_2\text{-O})_z - \{\text{where } z \text{ is a number ranging from } 500\text{-}5000\}$  with  $\text{R}^1_2$  representing aliphatic alkyl or alkenyl groups (*Col 3 Lines 4-27 and Example 2 Col 11 which shows a methyl group representing the  $\text{R}^1_2$* ) and is linear. These can also be combined with a liquid copolymer (Column 11 Examples 1 and 2).

The reference also teaches that such polymer emulsions can be formulated to contain end-blocked vinyl groups (*Column 14, Lines 55-66 and Col 11, Example 10*) that react with Sylyl ( $-\text{Si}\equiv\text{H}-$ ) groups that are on the  $\text{SiR}^1_2\text{-O-}$  polymer. One such composition taught (*Col 11 Example 2*) results in emulsion particle sizes of about 732

Art Unit: 4131

+/- 449 nanometers (or about 1189 nanometers down to about 283 nanometers); the range falls within the ranges for Claims 2 and 3.

*Beck et al. (Col 2 Lines 9-16)* also teaches the use of silicone dispersions, of the type indicated above, containing above 75% solids. The reference also generally describes making pre-crosslinked, high solids, gel phases emulsions (Col 5 Lines 1-21). This disclosure by *Beck et al.* addresses the viscosity requirement described in Claims 2 and 3 because these high solids gels (which are not noted by the Applicants when describing their claimed silicone emulsions) have viscosities that are higher than 60% solid-containing fluids described by the Applicant (Page 8, Paragraph above Example 2).

To address surfactant use in Claim 3, the approximate 5% surfactant percentage is addressed when *Beck et al. (Column 11 Example 2)* teaches use of nonionic surfactant and previously describes using surfactants in the range from 0.1 to 10 parts by weight based upon 100 parts by weight of the siloxane polymer (*Col 3 Lines 61-64*).

However, *Beck et al.* fails to teach the inclusion of a combination of fragrance compositions to make an overall fragrance composition of Claim 1, comprising three Composition Items: a) 10% or more (by weight) of a fragrance composition containing one or more perfume ingredients having a BP (boiling point) of 250°C or less {with a ClogP of less than 3.0}, b) at least 15 % of a fragrance composition containing one or more perfume ingredients having a BP of 250°C or less {with a ClogP of 3.0 or more}, and c) a fragrance composition containing one or more perfume ingredients having a BP of greater than 250°C {regardless of any ClogP value}.

The teachings by *Boden* (*US 4331571; Col 17 Example XIII*), on the other hand, provides information to those of ordinary skill in the art for making combinations of fragrances that have BP's and ClogP values of the type in the Applicant's Claim 1 requiring at least 20 percent (%) of first type "a", at least 20 percent of the second type "b", and at least 20 percent of the third type "c".

After introducing a way to enhance the fragrance of perfumes and perfumed articles (*Abstract*), *Boden* (*Col 17 Example XIII*) teaches a fragrance composition embodying the *Composition Items* requirement of Claim 1. In Example XIII of the reference, *Boden* demonstrates the composition of a perfume that embodies the following fragrances\*<sup>o+</sup>: Citronellol (11.17%)<sup>b</sup>, Gerinol (7.45%)<sup>a</sup>, Ethyl acetate (0.37%)<sup>a</sup>, Terpineol (7.45%)<sup>a</sup>, Phenyl ethyl alcohol (6.70%)<sup>a</sup>, Amyl cinnamic aldehyde (14.90%)<sup>c</sup>, cyclamal (8.94%)<sup>c</sup>, Tetrahydro linalool (2.79%)<sup>b</sup>, Phenyl ethyl acetate (0.37%)<sup>a</sup>, Citronellyl acetate (9.31%)<sup>b</sup>, Phenyl acetaldehyde dimethyl acetal (0.74%)<sup>a</sup>, Cinnamic alcohol (2.61%)<sup>c</sup>, Linalyl acetate (1.86%)<sup>b</sup>, Musk ketone (0.74%)<sup>c</sup>, Indole (0.74%)<sup>c</sup>, and Geranyl nitrile (0.74%)<sup>b</sup>. These add up to over 20 percent of *Item a*, over 20 percent for *Item b* and over 20% for *Item c* fragrances that are required to satisfy the percentages indicated in Claims 1-3.

*Boden* teaches a type of perfume fragrance composition (*Col 17 Example XIII*), and since *Beck et al.* teaches that the use of silicone polymer emulsions can be used as perfume carriers and hair conditioning—without indicating any perfume composition restriction (*Col 10 Lines 29-30*), then it would be obvious to use any perfume composition with *Beck et. al's* silicone emulsions, including the types claimed by the

Applicants. Therefore, Claims 1-3, involving silicone emulsions and fragrance compositions, are rejected as being obvious over *Beck et al.* in view of *Boden*.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Beck et al.* (US 5939478) in view of *Boden* (US 4331571) as applied to claims 1-3 above, and further in view of *Trinh* (US 5540853). *Beck et al.* address the use of silicone emulsions for perfume carriers as discussed above for Claims 1-2 in view of the composition by *Boden* (US 4331571, Col 17 Example XIII).

However, the fragrance composition provided by *Boden* (Col 17 Example XIII) does not clearly suggest an increase of 10% percent of the fragrance *Item a* and 10-20 percent more of fragrance *Item c* to be considered to be within the required amounts of 30 and 40-45 percent, respectively, required for composition *Items a* and *c* in Claim 6 as well as lesser increases required for Claims 4-5.

On the other hand, these limitations can be addressed by the teachings by *Trinh* (US 5540853 see discussion below) that show why the fragrance ranges for *Items a, b, and c* can be obviously extended, by at least 20%, to include the ranges of Claim 6 as well as Claims 4-5. *Trinh* has previously taught ranges that would also apply to those percentages of the *Composition Items a, b, and c*, required by the Applicants for Claims 1-5.

*Trinh* (Col 4 Lines 35-50) teaches that increasing the amount of certain perfume composition fragrances, with adequate boiling points and ClogP values, are effective when used in liquid personal cleaning compositions because they substantially remain

Art Unit: 4131

even after rinsing and drying. The fragrance compositions are included in carriers and along with surfactants (*Col 61 claim 1*).

*Trinh* teaches a range of compositions by demonstrating and comparing performances employing mixtures of *Item a*, *b*, and *c* compositions in order to provide compositions with fragrances that can endure (remain) past hair cleaning and hair drying (*Col 48 Lines 1-5*) and to compare them with compositions that are suggested as not as useful for doing so (*Col 46 Lines 4-6*). *Trinh's* teaching examples (*Col 46-47 Perfume Compositions A-E*), provide a basis for comparison, identifying terminology categories, and determining range of fragrance materials (from 0-90 percent) that use of ClogP and boiling point values to guide fragrance compositions with longevity or with lesser longevity performances without necessarily requiring extensive experimentation for future investigations for determining fragrance composition ranges for Claim 6 or for those used in Claims 1-5 with other ranges.

*Trinh (Col 46-47 Perfume Compositions A-E)* reveals 5 Tables, each containing a range of fragrance compositions with at least 2 of the *Composition Items* in mixtures that involve a permutation of ranges that can include those claimed by the Applicants. The compositions are then used in perfumed articles such as shampoos, that are said to "provide excellent in-use hair cleaning, lather, mildness, conditioning and especially long lasting perfume benefit even after the hair is dried with an electric hair dryer" (*Col 48 lines 1-5*). Perfume A contains 80 percent of *Item c* fragrances mixed with 20% of *Item 2* fragrances. Perfume B contains 90 percent of *Item c* fragrances mixed with 4 percent of *Item a*, and 6 percent of *Item b* fragrances. Perfume C contains 80 percent of

Art Unit: 4131

*Item a* fragrances mixed with 20 percent of *Item b* fragrances. Perfume D contains 80 percent of *Item c* fragrances mixed with 20 percent of *Item a* fragrances. Perfume E contains 80 percent of *Item b* fragrances mixed with 20 percent of *Item c* fragrances. In this case, the ranges embodied by *Trinh* (Col 46-47 *Perfume Compositions A-E*) for the fragrance composition percentages producing results (Col 48 lines 1-5) that prima facie agree, as expected, with those of Applicants (Tables 4-8 Pages 8-10). In this comparison, *Trinh* demonstrates the obviousness of the sub-ranges, noted by the Applicants in Claim 6 and for those used in Claims 1-5, which fall within the range Genus practiced by *Trinh* [See MPEP 2144.08 I.] without producing unexpected results.

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to have modified the compositions of *Beck et al.* in using the composition by *Boden* as a validation to the teachings of *Trinh* because *Beck et al.* provides motivation to use the use of viscous silicone gels as useful carriers for perfumes and for hair conditioning applications involving silicon emulsions that are claimed by the Applicant. And because the example of *Boden's* fragrance composition satisfies the additional requirements of Claim 1's fragrance compositions as well as also serving to verify the teachings of *Trinh* that obviously provide motivation for success when formulating either longer enduring perfumes or, if desired, less enduring fragrances. Therefore, Claims 4-6 are rejected as being obvious.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Beck et al.* (US 5939478) in view of *Boden* (US 4331571) in accord with the teachings above for Claims 4-6 In further view of *Trinh*.



Claim 7 is rejected in view of Beck et al. because the reference by *Trinh* also demonstrates uses of a shampoo composition with fragrance compositions, along with silicone materials (comprising silicone gum) (*Colum 48, first table, sub-referencing marker "2" in Col 49 Line 7*) with a 0.5 to 2.5 fragrance to silicone composition weight ratio (or a 1: 5 ratio). This information provides additional motivation to follow the examples of prior art taught by *Trinh* using the silicone emulsion and fragrance compositions taught by *Beck et al.* and by *Boden*. Therefore, Claim 7 would be obvious to one of ordinary skill in the art.

Claim 8-9 are also rejected because of the above teachings of *Beck et al.* and *Trinh*, discussed above, using the perfume formulation of *Boden*.

Claim 10-11 are rejected because *Trinh* also teaches a method of using a shampoo to clean hair (*Col 29 Lines 35-49*). Shampoos of this type are stated to provide long lasting perfume benefits to hair even after the hair is dried (*Col 48 lines 3-4*).

\*[It should also be noted that the superscripts a, b, and c, as applied above refer to fragrances that are classified by *Items a, b, and c* as listed above and in the Applicants' Claim 1.]

<sup>9</sup>[The composition by *Boden* totals to 1337.5 parts by weight. Composition contains other ingredients not presented above. These include: "Geranium bourbon" at 175 parts by weight or (13.08 percent); 7-methyl-3-methylene-6-octenenitrile (0.75%), indole (0.75%) and 1-ethoxy-1-ethanol acetate (1-ethoxyethyl acetate) at (1.87%). The ClogP and Boiling Point (and therefore, class type) of cinnamic alcohol and indole was found in the reference by *Clare et al.* (*US 7030068*)]

+ [The composition by *Boden* also includes an additional material known as Lyr<sup>al</sup>® that is a proprietary possession of International Flavors and Fragrances; it is also known as 4-(4-methyl-4-hydroxyamyl) cyclohex-3-ene carboxaldehyde (CAS 31906-04-4) (STN Search Results {search note} referenced per "Lyr<sup>al</sup> Chemical Abstracts Assessment" (7.45%). The atmospheric boiling point temperature is not published; however, it is reported to be 120 C, at 1 Torr, published by *Teegarden et al.* (*US 2947780 Col 4 Example 1*).]

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON GRESO whose telephone number is (571)270-7337. The examiner can normally be reached on M-F 0730-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner  
Art Unit 4131

AJG